**Geometry Honors**

**PS 5:**

*(1-10) Find the measure of each numbered angle. is a tangent; .*

11. Write an equation involving a, b and c. 12. Find the ration of x to y.

 (a, b and c are the measures of the bold arcs) (x, y arc measures; n, 2n angle measures)



13. If , then ?

14. If , then ? and 

15. If , then ? and 

16. If  and , then ?

17. If and , then  ?

18. If  and , then ?

**PS 6:**

1.  is tangent to circle O. Secant  is perpendicular to  at P. If  and , find

a) AB

b) the distance from O to 

c) the radius of circle O



2. A circle can be drawn through points X, Y, and Z.

a) What is the radius of the circle?

b) How far is the center of the circle from point W?

3. In the diagram,  is tangent to circle O and  intersects circle O at J. Find the radius of the circle.

**PS 7:**

***is tangent to the circle.***

1. If , then \_\_\_\_\_\_\_\_.

2. If , then \_\_\_\_\_\_\_.

3. If  and , then \_\_\_\_\_\_\_\_.

4. If , , and , then \_\_\_\_\_\_\_\_.

5. , , and  are tangents. Find the value of x and y.

*** and are secants and is a tangent.***

6. If  and , then \_\_\_\_\_\_\_\_.

7. If , , and , then \_\_\_\_\_\_\_\_.

8. If and , then \_\_\_\_\_\_\_\_.